

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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| In re Application of: Jedrick WELDON et al. | |
| Application No.: Not yet assigned | Group Art Unit: |
| Filed: November 9, 2001 | Examiner: |
| Attorney Docket No.: 09710-1111 | |
| Client Docket No.: UUN-99-002-C1 | |

For: METHOD, COMPUTER PROGRAM PRODUCT, AND APPARATUS FOR
COLLECTING SERVICE LEVEL AGREEMENT STATISTICS IN A
COMMUNICATION NETWORK

Assistant Commissioner for Patents
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Dear Sir:

Prior to examination on the merits, reconsideration of the above-identified patent application in view of the following remarks is respectfully requested.

IN THE SPECIFICATION:

Before the first line, please insert the following sentence:

The present invention is a continuation of U.S. Patent Application Serial Number 09/469,507 filed on December 22, 1999 (attorney docket number 09710-0026), the content of which are hereby incorporated by reference.

REMARKS

Reconsideration and allowance of this application is respectfully requested in view of the discussion below.

Claims 1-23 are presently active in this case. The present application presents claims 1-23 corresponding to claims 1, 3-8, and 11-26 from the parent case, serial number 09/469,507, now allowed, for examination on the merits. In the final Office Action in the parent case, (i) claims 12-23 and 25 were rejected under 35 U.S.C. §103(a) as obvious over *Mirek et al* (U.S. Pat. No. 5,878,032) in view of *Diebboll et al* (U.S. Pat. No. 5,886,643); (ii) claim 24 was rejected under 35 U.S.C. §103(a) as obvious over *Mirek et al* and *Diebboll et al* in view of acknowledged prior art; (iii) claims 1, 3, 5 and 6 were rejected under 35 U.S.C. §103(a) as obvious over *Smith et al* (U.S. Pat. No. 5,930,257) in view of *Mirek et al*; (iv) claims 4, 7, and 8 were rejected under 35 U.S.C. §103(a) as obvious over *Smith et al* and *Mirek et al* in view of *Diebboll et al*; and (v) claim 11 was rejected under 35 U.S.C. §103(a) as obvious over *Smith et al*, *Mirek et al* and *Diebboll et al* in view of acknowledged prior art.

First, Applicants wish to thank Examiner Trinh for the allowance of claims 10 and 27-31 in the parent case. In addition, independent claims 1, 9, 14, 22 and 23 and claims dependent therefrom in the present case are patentably distinguishable over the *Applied References* in the parent case, taken alone or in combination, as discussed below.

The *Applied References* in the parent case, taken alone or in combination, fail to teach or suggest sending a probe message over an in-band communication channel, as recited in independent claim 1 (emphasis added). In this respect, the final Office Action in the parent case, on page 5, item 4, acknowledges that the combination of *Smith et al* and *Mirek et al* fails to disclose sending a probe message over an in-band communication channel. In addition, *Diebboll*

et al and the acknowledged prior art fail to cure the above-noted deficiencies in *Smith et al* and *Mirek et al* and that *Smith et al*, *Mirek et al*, *Diebboll et al* and the acknowledged prior art, taken alone or in combination, fail to teach or suggest the noted features of the claimed invention, as recited in independent claim 1.

In the above respect, the final Office Action in the parent case attempts to cure such deficiency in *Smith et al* and *Mirek et al* by asserting that since *Mirek et al* is trying to determine a delay between two nodes, it would have been obvious to determine such delay in the actual path between the two nodes. However, it is not clear how such assertion teaches or suggests sending a probe message over an in-band communication channel, as recited in independent claim 1, since the delay could be measured, although not as accurately as with the claimed invention, based on other paths or channels.

In the above respect, the present invention includes recognition of problems associated with conventional probing systems and methods, wherein source and destination probes in such conventional systems and methods do not necessarily send a probe messages in-band (i.e., over a same physical path traversed by data packets sent between a source LAN 10 and a destination LAN 12), even though an SLA is tied to the performance of an in-band channel. See, e.g., page 6, lines 6-9 of Applicants' disclosure. The present invention recognizes and solves such problems with conventional probing systems and methods via the claimed invention, as recited in independent claim 1.

In contrast, none of the *Applied References* in the parent case recognize nor address such problems with conventional probing systems and methods, wherein source and destination probes in such conventional systems and methods do not necessarily send a probe messages in-band. Accordingly, one of ordinary skill in the art would not arrive at the claimed invention

based on the teachings of the *Applied References* in the parent case, taken alone or in combination.

Independent claims 9, 14, 22 and 23 are patentably distinguishable over the *Applied References* in the parent case, taken alone or in combination, for substantially the same reasons as discussed with respect to independent claim 1.¹

¹ i.e., Applicants submit that the *Applied References* in the parent case, taken alone or in combination, fail to teach or suggest: “A computer-readable medium carrying one or more sequences of one or more instructions for sending a probe message, the one or more sequences of one or more instructions including instructions which, when executed by one or more processors, cause the one or more processors to perform the steps of: (a) preparing a probe message; and (b) sending said probe message over an in-band communication channel,” as recited in independent claim 9;

“A communication system for gathering traffic statistics, comprising: a probing router configured to prepare performance statistics information; a probe poller processor configured to receive performance statistics information collected by a probing router that sends a probe message through an in-band channel; and a reporting mechanism coupled to said probe poller processor and configured to present a compilation of said performance statistics information for comparison against performance thresholds of a service level agreement,” as recited in independent claim 14;

“A probing router comprising: means for routing data packets within a virtual private network; means for preparing and sending a probe message through an in-band channel of the virtual private network; and an enclosure that houses said means for routing and said means for preparing and sending,” as recited in independent claim 22; and

“A method for collecting network performance statistics, comprising the steps of: (a) preparing a probe message with a probing router; (b) sending said probe message over an in-band communication channel; and (c) measuring a propagation time for said probe message to reach a predetermined location,” as recited in independent claim 23.

The present invention, as recited in independent claims 1, 9, 14, 22 and 23 and claims dependent therefrom, advantageously, provide an improved probing router, computer program product, system and method, due to claimed use of an in-band channel, as compared to conventional methods and systems.

The *Applied References* in the parent case, taken alone or in combination, fail to teach or suggest the noted features of the presently claimed invention.

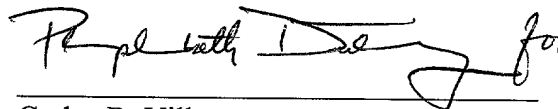
Based on the above discussion, the present invention, as recited in independent claims 1, 9, 14, 22 and 23 and claims dependent therefrom, is patentably distinguishable over the *Applied References* in the parent case, taken alone or in combination.

Consequently, in view of the above discussion, no further issues are believed to be outstanding in the present application and the present application is believed to be in condition for formal allowance. An early and favorable action is therefore respectfully requested. If, however, any unresolved issues remain, it is respectfully requested that the Examiner telephone the undersigned attorney so that such issues may be resolved as expeditiously as possible.

Respectfully Submitted,

DITTHAVONG & CARLSON, P.C.

11/9/01
Date



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